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PATENT

RESPONSE UNDER 37 C.F.R. 1.116 - EXPEDITED  
PROCEDURE - EXAMINING GROUP 3600

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 09/834,156 Confirmation No.: 3580  
Applicant(s): Chen, et al.  
Filed: April 12, 2001  
Art Unit: 3629  
Examiner: Janice A. Mooneyham  
Title: TRAVEL MANAGEMENT SYSTEM UTILIZING MULTIPLE  
COMPUTER RESERVATIONS SYSTEMS (CRS's)

Docket No.: 047138/257017  
Customer No.: 00826

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

## AMENDMENT AFTER FINAL UNDER 37 CFR § 1.116

Sir:

In response to the Final Office Action dated November 22, 2005, please amend the above-identified application as follows:

**Amendments to the Claims** are reflected in the listing of claims beginning on page 2 of this paper.

**Remarks/Arguments** begin on page 8 of this paper.

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Amendments to the Claims:

1. (Previously Presented) A method for making travel related bookings, comprising:
  1. providing access to a plurality of computer reservation systems (CRSs) for a client initiating a travel booking request;
  2. allowing the client to book at least one travel item segment from any one of the accessible CRSs; and
  3. generating a travel itinerary booking record including information associated with at least one booked travel item segment and information identifying each CRS for a respective booked travel item segment,  
wherein at least one of the providing, allowing, and generating steps is performed by a data processing system.
2. (Original) The method of claim 1, wherein a travel item segment is one of an air segment, a car segment, or a hotel segment.
3. (Cancelled)
4. (Cancelled)
5. (Currently Amended) The method of claim [[3]]1, further comprising, storing the travel itinerary booking record for the at least one booked travel item segment.
6. (Previously Presented) The method of Claim 5, further comprising, displaying the travel itinerary booking record to the client.
7. (Original) The method of claim 6, further comprising, allowing the client to modify the travel itinerary booking record.
8. (Original) The method of claim 1, wherein providing access to the plurality of computer reservation systems (CRSs) for the client includes:
  1. reading a predefined selection of the plurality of CRSs to be accessed during the travel booking request; and

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accessing the selected plurality of CRSs to check the availability of travel items at the CRSs for the travel booking request.

9. (Original) The method of claim 8, wherein the predefined selection of the plurality of CRSs includes a default CRS or a primary CRS and at least one secondary CRS.

10. (Original) The method of claim 8, wherein allowing the client to book at least one travel item segment from any one of the accessible CRSs includes:

displaying available travel items accessed from the selected plurality of CRSs for the travel booking request;

allowing the client to select a desired travel item; and

for each selected travel item,

booking the selected travel item with the respective CRS.

11. (Original) The method of claim 10, wherein only a lowest cost travel item accessed from the selected plurality of CRSs is displayed.

12. (Previously Presented) A travel management system (TMS) for making travel related bookings, the TMS comprising:

a server to provide access to a plurality of computer reservation systems (CRSs) for a client initiating a travel booking request; and

a booking engine to allow the client to book at least one travel item segment from any one of the accessible CRSs, wherein the booking engine generates a super passenger name record (PNR) including information associated with at least one booked travel item segment and information identifying each CRS for a respective booked travel item segment.

13. (Original) The travel management system of claim 12, wherein a travel item segment is one of an air segment, a car segment, or a hotel segment.

14. (Previously Presented) The travel management system of claim 12, further comprising, a database to store the super PNR including the at least one booked travel item segment.

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15. (Cancelled)

16. (Original) The travel management system of claim 14, further comprising, a client interface to cause the display of the super PNR to the client.

17. (Previously Presented) The travel management system of claim 12, wherein the client interface allows the client to modify the super PNR.

18. (Original) The travel management system of claim 12, further comprising a terminal access editor (TAE) to define a selection of the plurality of computer reservation systems (CRSs) for the client to be stored in a database and accessed during the travel booking request for the client.

19. (Original) The travel management system of claim 18, wherein the booking engine:

reads the database to determine the selected plurality of CRSs to be accessed during the travel booking request; and

accesses the selected plurality of CRSs to check the availability of travel items at the CRSs for the travel booking request.

20. (Original) The travel management system of claim 19, wherein the selection of the plurality of CRSs includes a default CRS or a primary CRS and at least one secondary CRS.

21. (Original) The travel management system of claim 19, further comprising a client interface to:

display available travel items accessed from the selected plurality of CRSs for the travel booking request at the client; and

allow the client to select a desired travel item.

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22. (Original) The travel management system of claim 21, wherein for each selected travel item, the booking engine books the selected item with the respective CRS.

23. (Original) The travel management system of claim 21, wherein only the lowest cost travel item accessed from the selected plurality of CRSs is displayed.

24. (Previously Presented) A machine-readable medium having stored thereon instructions, which when executed by a machine, cause the machine to perform the following:

providing access to a plurality of computer reservation systems (CRSs) for a client initiating a travel booking request;

allowing the client to book at least one travel item segment from any one of the accessible CRSs; and

generating a travel itinerary booking record including information associated with at least one booked travel item segment and information identifying each CRS for a respective booked travel item segment.

25. (Original) The machine-readable medium of claim 24, wherein a travel item segment is one of an air segment, a car segment, or a hotel segment.

26. (Cancelled)

27. (Cancelled)

28. (Previously Presented) The machine-readable medium of claim 24, further comprising, storing the travel itinerary booking record for the at least one booked travel item segment.

29. (Original) The machine-readable medium of claim 28, further comprising, displaying the travel itinerary booking record to the client.

30. (Original) The machine-readable medium of claim 29, further comprising, allowing the client to modify the travel itinerary booking record.

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31. (Original) The machine-readable medium of claim 24, wherein providing access to the plurality of computer reservation systems (CRSs) for the client includes:

reading a predefined selection of the plurality of CRSs to be accessed during the travel booking request; and

accessing the selected plurality of CRSs to check the availability of travel items at the CRSs for the travel booking request.

32. (Original) The machine-readable medium of claim 31, wherein the predefined selection of the plurality of CRSs includes a default CRS or a primary CRS and at least one secondary CRS.

33. (Original) The machine-readable medium of claim 31, wherein allowing the client to book at least one travel item segment from any one of the accessible CRSs includes:

displaying available travel items accessed from the selected plurality of CRSs for the travel booking request;

allowing the client to select a desired travel item; and

for each selected travel item,

booking the selected travel item with the respective CRS.

34. (Original) The machine-readable medium of claim 33, wherein only a lowest cost travel item accessed from the selected plurality of CRSs is displayed.

35. (Previously Presented) The method of claim 1, wherein the information associated with each CRS for a respective booked travel item segment includes at least one of a name of the CRS and a CRS locator.

36. (Previously Presented) The method of claim 1, wherein the CRSs include global distribution systems (GDSs) and direct connect CRSs.

37. (Previously Presented) The travel management system of claim 12, wherein the information associated with each CRS for a respective booked travel item segment includes at least one of a name of the CRS and a CRS locator.

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38. (Previously Presented) The travel management system of claim 12, wherein the CRSs include global distribution systems (GDSs) and direct connect CRSs.

39. (Previously Presented) The machine-readable medium of claim 24, wherein the information associated with each CRS for a respective booked travel item segment includes at least one of a name of the CRS and a CRS locator.

40. (Previously Presented) The machine-readable medium of claim 24, wherein the CRSs include global distribution systems (GDSs) and direct connect CRSs.

41. (Previously Presented) A method for making travel related bookings, comprising: providing access to a plurality of computer reservation systems (CRSs) for a client initiating a travel booking request;

allowing the client to book a plurality of travel item segments from accessible CRSs; and generating a travel itinerary booking record including information associated with the plurality of booked travel item segments, each booked travel item segment associated with a respective CRS and at least two booked travel item segments are associated with different respective CRSs,

wherein at least one of the providing, allowing, and generating steps is performed by a data processing system.

42. (Previously Presented) The method according to claim 41, wherein a travel item segment is one of an air segment, a car segment, or a hotel segment.

43. (Previously Presented) The method according to claim 41, wherein the CRSs include global distribution systems (GDSs) and direct connect CRSs.

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**REMARKS/ARGUMENTS**

The final Office Action rejects Claims 1-2, 5-8, 12-14, 24, 25, 28-31, 41, and 42 under 35 USC § 103(a) as being unpatentable over U.S. Patent No. 5,832,451 to Flake et al. The Official Action also rejects Claims 9-11, 18-23, 32-40, and 43 under 35 USC § 103(a) as being unpatentable over Flake in view of U.S. Patent No. 5,832,454 to Jafri et al. Moreover, Claim 5 has been rejected as being indefinite under 35 U.S.C. § 112, second paragraph, for depending on previously cancelled Claim 3.

As explained below, Applicants submit that independent Claims 1, 12, 24, and 41 are patentably distinguishable from the cited art, taken either individually or in combination. Claim 5 has been amended to properly depend from independent Claim 1 such that the rejection under 35 U.S.C. § 112, second paragraph, is overcome. In light of the claim amendments and subsequent remarks, which address the Examiner's response in the final Office Action and do not raise new issues, Applicants respectfully request reconsideration and allowance of the claims.

Independent Claims 1 and 24 recite generating a travel itinerary booking record including information associated with at least one booked travel item segment and information identifying each CRS for a respective booked travel item segment. Similarly, independent Claim 12 recites that a booking engine generates a super passenger name record (PNR) including information associated with at least one booked travel item segment and information identifying each CRS for a respective booked travel item segment.

With respect to independent Claims 1, 12, 24, and 41, the Examiner finds that although Flake does not disclose generating a travel itinerary booking record including information associated with at least one booked travel item segment and information identifying each CRS for a respective booked travel item segment, the Examiner contends that this information is "non-functional descriptive data." In particular, the Examiner believes that the method and system would perform the same regardless of the type of data on the booking record. Furthermore, the Examiner takes Official Notice that it is old and well known to document and record information associated with travel items so as to have the information available when needed.

Applicants initially request that the Examiner provide a reference or other evidence supporting the Official Notice assertion, as this conclusion is not "instant and unquestionable" as

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being well known at the time of the invention (MPEP § 2144.03) ("Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known.").

In addition, Applicants submit that Flake is distinguishable due to the fact that Flake does not teach or suggest generating a travel itinerary booking record or super PNR that includes information associated with at least one booked travel item segment and information identifying each CRS for a respective booked travel item segment, as recited by independent Claims 1, 12, and 24. The Examiner acknowledges that Flake does not teach this particular recitation but finds that the information on the travel booking record or super PNR is non-functional descriptive data. Applicants respectfully disagree, as the type of information provided on the travel booking record or PNR affects *how* the steps of the claims are performed. MPEP § 2106 states that a process that is different from the prior art with respect to functional descriptive material that alters *how* the process steps are to be performed must be considered in assessing patentability under 35 U.S.C. § 103(a), which is unlike non-functional descriptive material, such as "music or a literary work, encoded on a medium," "descriptive material [that] does not reconfigure the computer," or "storing a song on a disk." In contrast to the clear examples of non-functional descriptive material set forth in the MPEP, the method of Claim 1 recites generating a travel booking record that includes generating information in addition to standard PNR information. For example, the information identifying each CRS affects how a data processing system operates when generating such information. In this regard, code would need to be written to perform the functions of the data processing system (i.e., the generating step) including, in particular, code to generate a travel itinerary booking record or super PNR including information associated with at least one booked travel item segment and information identifying each CRS for a respective booked travel item segment. Thus, generating a travel itinerary booking record or super PNR that includes information identifying each CRS for a respective booked travel item segment affects how the method is performed by requiring steps to be taken to compile the information identifying each CRS for a respective booked travel segment and including it in the travel itinerary booking record or super PNR that is generated, which differs from conventional techniques for generating standard PNR's. The impact of the information identifying each CRS

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for a respective booked travel item segment upon how the steps of the method are performed and the resulting conclusion that such information is, in fact, non-functional descriptive material is in sharp contrast to the steps of storing data in which the type of data being stored does not affect how the step is performed, and the data is properly considered non-functional descriptive material. The same reasoning holds true for independent Claims 12 and 24, which recite a system and machine-readable medium, respectively, as the information affects how the system performs and how the information is encoded on the machine-readable medium.

Moreover, Applicants submit that the cases relied upon by the Examiner, namely *In re Gulack*, 703 F.2d 1381 (Fed. Cir. 1983), and *In re Lowry*, 32 F.3d 1579 (Fed. Cir. 1994), provide precedent that supports the remarks above. In particular, *In re Lowry* is instructive, as the claims at issue involved claims relating to a memory, data processing system, and methods for processing and creating data structures. The Federal Circuit held that "the Board erroneously extended a 'printed matter rejection' [set forth in *In re Gulack*] under sections 102 and 103 to a new field in this case, which involves information stored in a memory." 32 F.3d. at 1583. Moreover, the court in *In re Lowry* stated that "[t]he printed matter cases have no factual relevance where 'the invention as defined by the claims requires that the information be processed not by the mind but by the machine, the computer.'" *Id.* (citing *In re Berhardt*, 417 F.2d 1395, 1399 (CCPA 1969)). Like the claims distinguished from the printed matter cases in *In re Lowry*, the method, system, and machine-readable medium of the claimed invention dictate how the travel itinerary booking record and super PNR are generated and what information is provided thereon, i.e., information associated with at least one booked travel item segment and information identifying each CRS for a respective booked travel item segment. Furthermore, the Federal Circuit stated in *In re Lowry* that the Applicant "[did] not claim merely the information content of a memory," *id.*, which is analogous to the claims of the present application, where it is the generation of the travel booking record and super PNR that is claimed rather than the travel booking record or super PNR. Therefore, as set forth in *In re Lowry*, the claims of the present application "are not analogous to printed matter," and the Examiner "is not at liberty to ignore such limitations." *Id.* at 1584.

Therefore, the rejection of Claims 1, 12, and 24 under 35 U.S.C. § 103(a) is overcome. Since the dependent claims include each of the recitations of respective independent Claims 1,

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12, and 24, the rejection of the dependent claims is also overcome for at least the same reasons as described above in conjunction with the independent claims.

The Examiner groups Claim 41 with the rejection of the other independent claims but does not specifically address the claim. Independent Claim 41 was added in the previous Amendment dated August 22, 2005 and recites providing access to a plurality of CRSs for a client initiating a travel booking request, allowing the client to book a plurality of travel item segments from accessible CRSs, and generating a travel itinerary booking record including information associated with the plurality of booked travel item segments, where each booked travel item segment is associated with a respective CRS and at least two booked travel item segments are associated with different respective CRSs.

Flake does not teach or suggest generating a travel itinerary booking record that includes information associated with a plurality of booked travel item segments, where each booked travel item segment is associated with a CRS and at least two booked travel item segments are associated with different CRSs, as recited by independent Claim 41. In this regard, Flake discloses that tasks are associated with PNRs and may be sorted by CRS. As also disclosed by Flake, "a queue may list five PNRs, three related to airline travel, and two related to bus travel. Airline travel arrangements are typically made using information from an airline travel [CRS], while bus travel arrangements are made using information from a different [CRS]." Col. 14, lines 62-67. Thus, Flake only discloses that a PNR includes information for a single CRS, while independent Claim 41 recites that a PNR includes information for a plurality of booked travel item segments associated with respective CRSs.

Moreover, Jafri does not teach or suggest generating a travel itinerary booking record including information associated with the plurality of booked travel item segments, where each booked travel item segment is associated with a respective CRS and at least two booked travel item segments are associated with different respective CRSs, as recited by Claim 41. Although Jafri discloses that separate PNRs may be created for each flight option returned to a user, the user only selects a single PNR to reserve a flight, and Jafri does not teach or suggest that a single PNR is capable of including all of the flight options. Furthermore, Jafri only permits users to access a single CRS to complete a reservation for different travel item segments (e.g., flight, hotel, or car rental).

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Even assuming the Examiner believes that Claim 41 also includes non-functional descriptive information, Applicants submit that the claim recites a travel booking record including functional-descriptive information. As discussed above, generating information identifying each CRS for a respective booked travel item segment affects how the method is performed. Similarly, conventional booking records, such as those disclosed by Flake and Jafri, may include standard PNR data for a single booked travel item segment (e.g., flight) rather than information associated with a plurality of booked travel item segments. Thus, the information associated with a plurality of booked travel item segments affects how the generating step is performed, such as by the operation of a data processing system performing the generating step (i.e., code written to perform this function).

As such, neither Flake nor Jafri, taken alone or in combination, teaches or suggests independent Claim 41, and Claim 41 recites functional-descriptive material. Thus, Applicants submit that the rejection of independent Claim 41, and all those claims that depend therefrom, under 35 U.S.C. § 103(a) is overcome.

Each of the dependent claims includes the recitations of a respective independent claim and are, therefore, patentably distinct from the cited references for the reasons described above. Furthermore, Applicants submit that neither Flake nor Jafri, taken alone or in combination, teaches or suggests the recitations set forth by several dependent claims of the present application, thereby providing additional bases of distinction. For example, the cited references do not teach or suggest Dependent Claims 8, 19, and 31, which recite reading a predefined selection of the plurality of CRSs to be accessed during the travel booking request, and accessing the selected plurality of CRSs to check the availability of travel items at the CRSs for the travel booking request. The Examiner relies on portions of Flake that disclose profile information, such as vendor preferences, may be contained in the relational database. In addition, Flake discloses that the system may prompt a travel agent to determine whether a travel services vendor should be contacted to complete a selected transaction.

However, Applicants submit that Claims 8, 19, and 31 are distinctly different from Flake, as the predefined selections relate to predefined CRSs, rather than vendors, that may be accessed. In fact, Flake specifically defines a CRS as a "computer reservation system," in contrast to "vendors (e.g., airlines)," which provides support that Flake intended there to be a distinction

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between the two. Moreover, Flake only discloses that "the agent can take the customer's preferences into account" (col. 4, lines 13-16) rather than access the vendor for checking availability. Thus, Applicants submit that the vendor preferences of Flake are clearly distinct from the selected CRSs that are accessed to check the availability of travel items at the CRSs for a travel booking request, as recited by Claims 8, 19, and 31.

Moreover, neither cited reference teaches or suggests dependent Claims 9, 20, and 32, which recite that the predefined selection of the plurality of CRSs includes a default CRS or a primary CRS and at least one secondary CRS. The Examiner acknowledges that Flake does not teach this particular recitation but believes that Jafri overcomes Flake's shortcomings. In this regard, Jafri discloses that flights are selected based on seat availability in a desired class, such as best fare, coach, business, or first class. Applicants respectfully submit that it is well known in the art that CRSs provide availability, pricing, and booking capabilities, which are distinctly different from a particular seat class. Furthermore, Jafri discloses that the flights are selected based on availability of the pre-selected seat class, where availability has no correlation to a particular CRS, such as a GDS or direct connect CRS.

In addition, neither Flake nor Jafri discloses dependent Claim 18, which recites that the system of Claim 12 further comprises a terminal access editor (TAE) to define a selection of the plurality of computer reservation systems (CRSs) for the client to be stored in a database and accessed during the travel booking request for the client. The Examiner concedes that Flake does not disclose this particular recitation, but relies on Jafri, which discloses server files including Client Servicing files relating to the assignment of Terminal Addresses (TA) used to access the CRS and files relating to the algorithm used to process travel requests. However, TA's refer to connections to a CRS, while the TAE of the claimed invention is a component of the super PNR TMS server and is utilized by the client to define the CRSs the client wishes to use. For example, Figure 5 of the present application illustrates data used by a TAE to define the CRSs, and illustrates that the assignment of TA's for accessing a particular CRS is distinctly different than the TAE that defines a selection of CRSs for the client for storing on a database or accessing during the booking request.

The Examiner also finds that to define a selection of a plurality of CRSs for the client to be stored in a database and accessed during the travel booking request for the client is directed to

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“intended use.” However, MPEP § 2106 states that the “intended meaning of terms used in a claim will dictate whether the language limits the claim scope. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.” Claim 18 nowhere indicates that the selection of CRSs stored in a database and accessed during booking is optional and, rather, it necessarily limits the scope of the claim. Applicants do not generically claim a TAE but rather a TAE that is used to define a selection of CRSs to be stored in a database and accessed during the booking request. Therefore, Applicants submit that all recitations of dependent Claim 18 should be considered for purposes of patentability.

Moreover, none of the cited references teach or suggest dependent Claims 35, 37, and 39, which recite that the information associated with each CRS for a respective booked travel item segment includes a name of the CRS and/or a CRS locator. The Examiner finds that this recitation is non-functional descriptive data not related to the steps of the method or the structure of the system. However, as described above with respect to independent Claims 1, 12, and 24, the information provided on the travel booking record or super PNR is necessarily functional and is distinguishable for at least those reasons discussed above with respect to independent Claims 1, 12, and 24. In addition, the specification of the present application states that the CRS locator can be used to search for booking records (p. 25, lines 29-30) such that a client can locate a PNR and create, change, or cancel booked travel item segments even though they are associated with different CRSs. Thus, Claims 35, 37, and 39 recite information that is directly related to the functionality of the claimed invention.

Therefore, Applicants submit that the pending dependent claims are distinguishable for at least those reasons discussed above with respect to independent Claims 1, 12, and 24. In addition, Applicants submit that dependent Claims 8, 9, 18, 19, 20, 31, 32, 35, 37, and 39 are further distinguishable from the cited references as explained above.

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#### CONCLUSION

In view of the amendments and remarks presented above, which do not raise new issues, it is respectfully submitted that all of the claims of the present application are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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